

High Tides.—Mobile, 3d, causing serious damage. Smithville, 21st, bath-houses swept away; wind blew at the rate of 84 miles per hour for about five minutes; considerable damage to the engineers' works on Smith's Island. Key West, 16th; Portsmouth, N. C., 25th, 26th; Charleston, 27th.

TEMPERATURE OF WATER.

The temperature of water, as observed in rivers and harbors at signal service stations, with the average depth at which observations were taken, is given in the table on the left hand side of chart No. III. Owing to sickness of observer, observations wanting at Punta Rassa on the 14th.

ATMOSPHERIC ELECTRICITY.

Thunder Storms.—In the various districts they were reported on the following dates: New England, 1st, 2d, 4th to 7th, 9th, 12th, 13th, 19th, 21st, 27th; Middle Atlantic states, 1st, 2d, 6th to 8th, 10th, 12th, 13th, 15th, 21st, 22d; South Atlantic states, 2d, 3d, 6th to 11th, 13th to 15th, 20th to 22d, 30th; Florida peninsula, 1st, 2d, 4th to 10th, 14th, 19th, 22d, 23d to 25th, 29th; Eastern Gulf states, 2d to 7th, 10th to 15th, 20th to 25th, 30th; Western Gulf states, 5th to 7th, 9th, 11th, 12th, 14th to 16th, 20th to 23d, 25th, 27th, 30th, 31st; Ohio valley and Tennessee, 4th to 9th, 11th to 14th, 18th to 21st, 23d to 26th, 29th to 31st; Lower Lake region, 1st, 2d, 6th, 7th, 9th, 10th, 12th, 31st; Upper Lake region, 2d to 6th, 9th, 11th, 12th, 16th, 19th, 25th, 26th, 31st; extreme Northwest, 1st, 4th, 8th, 10th, 16th, 21st, 22d, 26th, 28th, 29th; Upper Mississippi valley, 2d to 6th, 11th to 13th, 16th to 18th, 20th, 23d to 26th, 29th to 31st; Lower Missouri valley, 1st, 2d, 5th to 7th, 9th, 12th, 15th to 19th, 21st to 31st; Northern Slope, 2d, 4th, 7th to 14th, 16th, 19th, 21st, 25th to 31st; Middle Slope, 1st to 7th, 9th, 14th, 19th, 21st to 31st; Southern Slope, 1st to 6th, 8th, 12th, 13th, 14th, 16th, 18th, 20th, 21st to 23d, 28th to 30th, 31st; Rio Grande valley, 1st, 2d, 6th, 7th, 9th, 12th, 13th to 15th, 19th, 20th, 22d, 23d, 30th, 31st; Southern Plateau, 1st to 20th, 22d to 25th, 27th, 28th; Middle Plateau, 4th, 6th, 7th, 9th to 11th, 14th, 16th, 18th; Northern Plateau, 4th, 7th, 13th, 14th, 16th, 18th, 20th, 21st, 24th, 26th, 28th, 29th; North Pacific coast region, 13th, 26th, 30th; South Pacific coast region, 5th to 11th.

Atmospheric Electricity Interfering with Telegraphic Communication.—Ft. Missoula, Mont., 18th; Umatilla, 7th; Prescott, 7th; Pike's Peak, 21st, lightning arrester and grounding badly damaged; Jacksboro, Tex., 28th; Stockton, Tex., 22d, 23d; Ft. Sill, 1st, 4th, 5th, 6th, 18th, 28th, 30th; Ft. Bennett, 29th; Mason and Fredericksburg, Tex., 23d.

Auroras.—There were no consecutive displays reported between New England and the Northwest during the month. At isolated stations the following observations were reported: Eastport, 24th, 10.30 p. m.; Gardiner, Me., 20th, 9 p. m.; Newport, Vt., 24th; Strafford, Vt., 8th, 9 p. m.; Embarrass, Wis., 20th, 11 p. m.; Duluth, 13th, 11 p. m.; 24th, 9.30 p. m.; Clinton, Ia., 7th, 1.30 a. m.; Clear Creek, Neb., 19th, 24th, 25th, very faint; St. Vincent, 5th, 9.30 p. m., single arch; 12th, 10 p. m., bright arch, altitude 10°, dark segment; 18th, 10 p. m., faint diffuse light; 20th, 10 p. m., a few long streamers, faint, and of short duration; 23d, from 8.30 to 9.40 p. m.; 24th, 9.40 p. m., faint; 26th, 8.30 p. m., bright, without streamers. Bismarck, 20th, 8.30 p. m., faint streamers; Ft. Stevenson, Dak., 20th; Ft. Keogh, Mont., 19th, 11.30 p. m., diffuse light; Springfield, Mass., 20th, 11 p. m., beautiful display, lasting nearly half an hour.

Zodiacal Light.—Mobile, 15th; Nashville, 1st, 14th, 16th, 17th, 22d, 24th, 25th, 26th, 27th; Monticello, Ia., 21st, 22d.

OPTICAL PHENOMENA.

Lunar halos have been observed in the various districts on the following dates: New England, 8th, 10th, 12th, 14th; Middle Atlantic states, 8th, 11th, 12th, 31st; South Atlantic states, 3d, 8th, 11th, 12th, 13th, 26th; Florida peninsula, 2d, 3d, 5th, 10th; Eastern Gulf states, 1st, 2d, 4th, 6th, 9th; Western Gulf states, Indianola, 10th, 11th; Ohio valley and Tennessee, 5th, 8th, 9th, 10th, 11th, 14th; Lower Lake region, Sandusky, 8th, 11th; Upper Mississippi valley, La Crosse, 12th; extreme Northwest, Moorehead, 28th; Middle Slope, 2d, 10th; Southern Plateau, 1st, 3d, 5th; Middle Plateau, Salt Lake City, 8th; California, Poway, 5th.

Solar halos have been observed in the various districts on the following dates: New England, 1st, 7th, 26th, 28th; Middle Atlantic states, 1st, 8th, 12th, 13th, 26th; South Atlantic states, 2d, 16th; Florida Peninsula, 9th, 15th; Eastern Gulf states, 14th, 18th; Ohio valley and Tennessee, 1st, 3d, 8th, 10th, 19th, 24th, 27th; Lower Lake region, 8th, 24th, 26th; Upper Lake region, Alpena, 25th; Upper Mississippi valley, 9th, 10th, 11th, 12th, 13th, 16th, 17th,